BEST AVAILABLE COPY

RECEIVED
CENTRAL FAX CENTER

In the Claims

JAN 0 5 2007.

Amend claims 1-11 as follows:

1. (Currently Amended) A method for accessing memory cells within a memory array operated with a precharge mechanism, in which differential read and write access operations are performed by activating a true bitline and a complement bitline, the method comprising:

determining whether a next memory access operation occurring in a clock cycle subsequent to a current an access operation occurring in a current clock cycle is a read access operation or a write access operation; and

performing a precharge of the true and complement bitlines only when a read access operation follows the access operation occurring in the current clock cyclé.

- 2. (Previously Amended) The method according to claim 1, wherein the memory array comprises a static random access memory (SRAM) array.
- 3. (Previously Amended) The method according to claim 1, in which a first precharge control signal is combined with a read cycle (n+1) control signal to evaluate whether a next memory access cycle comprises a read access or a write access.
- 4. (Original) The method according to claim 3, wherein the first precharge control signal and the read cycle n+1 control signal are combined to yield a second precharge signal.
- 5. (Original) The method according to claim 3, wherein the read cycle (n+1) control signal is asserted according to an operating mode of the memory array, such that a write access operation occurring over a plurality of system clock cycles results in a continuous assertion of the next read cycle (n+1) control signal until the write access operation is complete.
- 6. (Original) The method according to claim 3, wherein the read cycle (n±1) control signal is asserted two system clock cycles in advance of a next memory access operation during a delay between when an address of the memory array is specified and a current access operation is complete.

DE920030003US1 SN 10/711.982

BEST AVAILABLE COPY

usbtvlbw

- 7. (Original) The method according to claim 3, wherein the next read cycle (n+1) control signal is asserted after a delay of one clock cycle during a period of time when no memory operation is performed.
- 8. (Withdrawn)
- 9. (Previously Presented) An integrated circuit memory array adapted for low power operation, comprising:
- a plurality of addressable memory cells arranged in rows and columns, the memory cells segmented into a plurality of memory blocks;
 - a plurality of column lines, each coupled to a corresponding column of inchiory cells;
 - a plurality of row lines, each coupled to a corresponding row of memory cells;
- a precharge circuit coupled to the plurality of row lines, the precharge circuit provided to assert the plurality of row lines in a memory block to a high logic level following a memory access operation:
- a first precharge signal controller coupled to the precharge circuit, the first precharge signal controller provided to generate a first precharge control signal;
- a read cycle signal controller for generating a read cycle (n+1) signal when a next memory access operation is a read access operation; and
- a logical AND gate adapted to evaluate the first precharge control signal and the read cycle control (n+1) signal, the logical AND gate asserting a second precharge control signal when a next memory access is a read access operation for controlling the precharge circuit.
- (Previously Presented) An integrated circuit memory array adapted for low power operation. comprising:
- a plurality of addressable memory cells arranged in rows and columns, the memory cells segmented into a plurality of memory blocks:
 - a plurality of column lines, each coupled to a corresponding column of memory cells:
 - a plurality of row lines, each coupled to a corresponding row of memory cells;
- a precharge circuit coupled to the plurality of row lines, the precharge circuit provided to assert the plurality of row lines in a memory block to a high logic level following a memory access

BEST AVAILABLE COPY

802-769-8938 >> USPTO

operation;

2007-01-05 11:05

a first precharge signal controller coupled to the precharge circuit, the first precharge signal controller provided to generate a first precharge control signal;

a read cycle signal controller for generating a read cycle (n=1) signal when a next memory access operation is a read access operation; and

a multiplexer adapted to evaluate the first precharge control signal and the read cycle control (n+1) signal, the multiplexer asserting a second precharge control signal when a next memory access is a read access operation for controlling the precharge circuit.

- 11. (Previously Presented) The memory array according to claim 9, wherein the memory array is a static random access memory (SRAM).
- 12. (Previously Presented) The memory array according to claim 10, wherein the memory array is a static random access memory (SRAM).

DE920030003US1 SN 10/711.982